vial. This little vial was then placed in the larger vial with the growing chufa plant. On August 10 and subsequently the larva was observed through the glass in its excavation in the tuber. On April 25, 1933, it was obviously in the prepupal stage and by April 29 it was a pupa.

The duration of the larval stage was between 276 and 280 days. As the adult issued May 16, the duration of the pupal stage was between 16 and 19 days. The period from oviposition to the issuance of the adult covered between 299 and 304 days.

(To be continued.)

## A New Genus and Species of Coleoptera (Chrysomelidae) from Southwestern United States.

By Burdette E. White, Merced, California.

On a recent collecting trip into the desert region of Southern California, the writer discovered a tiny species of Chrysomelidae (Subfamily Galerucinae) apparently feeding on some part of the blossoms of a species of Rhus (Sumac). Having a certain familiarity with this coleopterous family, and not recognizing one of our described species in this diminutive form, he directed considerable energy in its pursuit that resulted in the capture of twenty-eight specimens. Subsequent study proved this insect to represent a new species and a new genus, which in the opinion of the author, must constitute a new tribe —Serraticollini—and is tentatively placed preceding the tribe Luperini. During the course of study germane to this problem, the writer found six specimens strikingly similar to the above beetles among some material received for identification from F. H. Parker of Globe, Arizona. Careful comparison of the California and Arizona specimens show that they are abundantly distinct. It would seem peculiar that two species of such an unique character should be unknown to science; however, they are early season forms, probably depending on the blossoms of their host for their livelihood, a fact which may have contributed to their previous obscurity.

The writer wishes to express his sincere appreciation for

assistance received from Mr. J. J. du Bois of Turlock, California, Mr. F. H. Parker of Globe, Arizona, and Dr. E. Gorton Linsley of the University of California at Berkeley.

## SERRATICOLLIS new genus.

Elongate, parallel, sparsely pubescent above and beneath. Head four-fifths as wide as greatest width of pronotum, eyes broadly oval, front not carinate between the antennal insertions; antennae feebly clavate, attaining the basal third of elytra; segments subequal in length, 8th, 9th, and 10th segments perceptibly shorter; the ultimate segment a little longer, the apical five segments noticeably but not strongly tumescent, the apical segment fusiform. Pronotum slightly longer than wide in

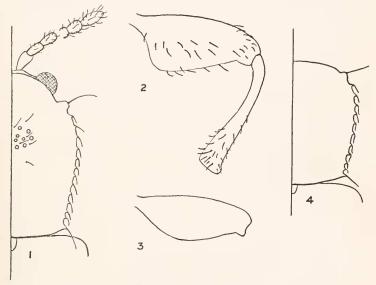


Fig. 1. Pronotum of *Scrraticollis rhois* n. sp. (3); Fig. 2, Mesothoracic femur of *S. rhois* (3); Fig. 3, same for *S. parkeri*, n. sp.; Fig. 4, Pronotum of *S. rhois* ( $\mathfrak{P}$ ).

male, quadrate or feelly transverse in female; narrowest at base, gradually widening to apical third and then gradually narrowing to apex; apical angles forming prominent, blunt denticles, basal angles with smaller acute teeth; base margined,

a transverse impression near base producing a moderate transverse ridge between basal and ante-basal impressions; lateral margins finely serrate; apex rounded, anterior margin obscure; in the male the apex is moderately, arcuately produced over the vertex of the head. Elytra elongate, parallel-sided; epipleura nearly vertical, reaching to apex; surface coarsely punctate, the punctures arranged in closely approximate striae producing relatively narrow intervals, the intervals with a row of minute setigerous punctures, the setae arranged in a row, one seta in width alternating with the primary striae. Anterior coxal cavities closed behind, coxae realtively widely separated by prosternum. Femora all subequally tumid, tibae curved and more slender near base, all tibae unarmed; first and second tarsal segments subequal on all legs; claws appendiculate, divergent.

Genotype: Serraticollis rhois n. sp.

To compare Serraticollis with any known North American genus would only lead to confusion. It apparently has no close relative in our fauna. In fact, it appears out of place in the subfamily Galerucinae and seems to be as closely related to Sagrinae and Orsodacninae. Later studies including all the Chrysomelid genera may result in changing the position of Serraticollis possibly to another subfamily; but the margined pronotum places it for the present in Galerucinae. In Bradley's "Key To The Genera Of N. A. Beetles", 1930, Serraticollis would key out to the tribe Monoleptini on the basis of the closed anterior coxal cavities. Its affinities with this tribe, other than the coxal character, are extremely remote and the proposed new tribe would appear to be amply justified. The sexes are definitely dimorphic as regards the structure of the pronotum.

Serraticollis rhois new species.

Size small, elongate, parallel, rufotestaceous; antennae, legs, and sometimes pronotum slightly lighter; pronotum sparsely covered with coarse punctures at base, more densely punctate near apex, with a secondary system of fine, setigerous punctures. Average length, 2.25 mm.

¿: Head rufotestaceous, darker on the vertex, sparsely punctate with small setigerous punctures, vertex strongly alutaceous; antennal sockets approximate, separated by half the length of first antennal segment; a small, median, circular impression lies just above and between the sockets; clypeus broadly rounded across apical margin. Antennae extending to basal third of elytra, moderately clavate, rather densely clothed with whitish setae except basal segment which is noticeably less setigerous.

Pronotum coarsely sparsely punctate on disc, more densely so near apex, smaller setigerous punctures sparsely placed among the primary punctures, the setae moderately long, fine and closely appressed; ante-basal impression strongly developed; margin minutely serrate, the denticles each bearing a seta, the seta of the four angular denticles relatively long; the apical margin of pronotum produced as a hood which does not contact the head beneath but forms a shallow cavity with the apex of pronotum as a roof; the side margins are subparallel with the greatest width at apical third. Scutellum flat, faintly alutaceous with a few minute setigerous punctures; broadly rounded apically.

Elytra elongate, parallel, rufotestaceous; surface slightly depressed near basal fourth, humeri well developed; surface with relatively coarse punctures arranged in ten well defined, even, closely placed striae and a short scutellar stria on each elytron, the seventh also short, not reaching near base; the intervals with a single row of minute setigerous punctures, the setae whitish, long and directed caudad, forming even rows one seta wide, these rows alternating with the coarsely punctured striae.

Body beneath fuscous, the prothorax and legs rufotestaceous, meso-thoracic, meta-thoracic, and abdominal sternites alutaceous, sparsely covered with minute setigerous punctures; prosternum smooth and shining at least over apical half; middle femora strongly, abruptly constricted on lower margin near base; last ventral segment with a crescentiform genital orifice near apex. Length 2.35 mm.; width, .9 mm.

9: Differs noticeably from male in structure of pronotum and genital orifice. The pronotum of female is not produced to form the hood as in male, but is subquadrate; the middle femora are not strongly constricted at base; the last ventral segment of the female is entire, feebly constricted approaching apex. Length, 2.75 mm.; width, 1.2 mm.

Holotype male, allotype female, captured six miles west of Beaumont, Riverside County, California (Main road from Riverside to Beaumont), IV-5-1941, from flowers of Rhus sp., by the author in whose collection they are deposited. Twenty-six paratypes (16 \, 2, 10 \, 3) with same data are deposited as follows: One pair each in collections of The Academy of Natural Sciences of Philadelphia, C. A. Frost, California Academy of Sciences, and R. G. Dahl; one female each in the collections of Mr. J. J. du Bois, Mr. K. S. Hagen, Mr. W. F. Barr, Mr. Borys Malkin and Dr. W. J. Brown; the balance remain in the writer's collection.

In the series of twenty-eight specimens there appears to be very little variation other than size and the normal sexual differences. The structure of the pronotum, middle femora, and last ventral segment greatly facilitate sex determination. The types represent close to the maximum of size which ranges from 2 mm. to 2.75 mm. The males average slightly larger than the females. This species is one of the smallest North American members of the Galerucinae known to the writer and can be easily identified from the generic and specific descriptions. Figures of the salient characters of this species as well as the following one are included to enhance speedy determination. Serraticollis parkeri new species.

Size, form, and color of S. *rhois*; pronotum less elongate and less arcuate in male, transverse in female; middle femora of male evenly, gradually tapering to base; elytral intervals not convex. Average length, 2 mm.

&: Head feebly punctate, vertex alutaceous, a few relatively long setae between upper limits of eyes; antennae reaching near basal third of elytra, segments subequal in length, outer segments slightly tunesent to form a feeble club.

Pronotum rufous, one-fourth longer than wide, widest at apical two-fifths; surface sparsely punctate on disc, more densely and coarsely punctate at apex; ante-basal, transverse impression well developed; lateral margins finely serrate; the apical angles produced to form a prominent, blunt denticle; apical margin feebly arcuate, finely margined; surface sparsely, finely pubescent.

Elytra rufotestaceous; punctures moderate sized, striately

arranged, the intervals flat with minute setigerous punctures, the setae directed caudad but obliquely so; apex truncate.

Body beneath alutaceous and rufotestaceous in great part, the anterior and lateral surface of prothoracic sclerites smooth and paler—rufous; surface sparsely, finely punctate, finely pubescent; last ventral segment with crescentiform genital orifice near apex; legs rufous; the mesothoracic femora evenly, gradually constricted to base. Length, 2 mm.; width, 0.8 mm.

9: Similar to male but with pronotum slightly wider than long; last ventral segment feebly constricted to apex, with genital orifice at apex. Length, 2 mm., width, 0.8 mm.

Holotype male, allotype female, collected at Globe, ARIZONA, IV-25-1933, on Rhus, by Mr. F. H. Parker are in the author's collection. Four paratypes (3 & , 1 \, \varphi\) with same data are in the collection of Mr. Parker in whose honor the species is named.

There seems to be no appreciable variation among the six specimens at hand other than the normal sex differences.

Parkeri superficially resembles rhois but is much more feebly sexually dimorphic. The greatest differences are present in the males. The differences in the structure of the pronotum (more strongly produced and arcuate apically in rhois) and the meso-thoracic femora (strongly constricted on lower edge near base in rhois) will readily separate the two species. However, the elytral punctures are coarser in rhois which condition makes the intervals more convex than in parkeri. The elytral setae in the former are longer and parallel to striae where in the latter they are externally oblique to the striae. The females seem to be more coarsely sculptured and with pronotum a bit less transverse in rhois. Otherwise they are quite similar in the two forms.

## **OBITUARY**

Prof. J. J. Davis contributes to *Science* for November 28, 1941, an obituary notice of Prof. James Troop, emeritus professor of entomology at Purdue University since 1920. Prof. Troop was born at Bennington, New York, March 14, 1853, and died at Urbana, Illinois, October 14, 1941. He became connected with Purdue in 1884, and was active in teaching and horticulture.